

# Biomedical tips and tricks to help our kids

**Amy Derksen, ND**

**[www.holistichealingarts.org](http://www.holistichealingarts.org)**

**Bellevue, Washington**

**[doctoramy@comcast.net](mailto:doctoramy@comcast.net)**

**P 425-709-2787 F 425-709-2789**

# My background

---

- BS in Biochemistry 1998
- Doctorate of Naturopathic Medicine, Bastyr University- 2003
- Worked with Dr Klinghardt 2003-2005
- Naturopathic physician using both prescription and natural treatments
- Practice focus is autism and adults with chronic illness not well managed with conventional medicine
- I utilize autonomic response testing with all patients to help sort through all of the treatment options and now teach for Dr. K's academy showing others how to do this work

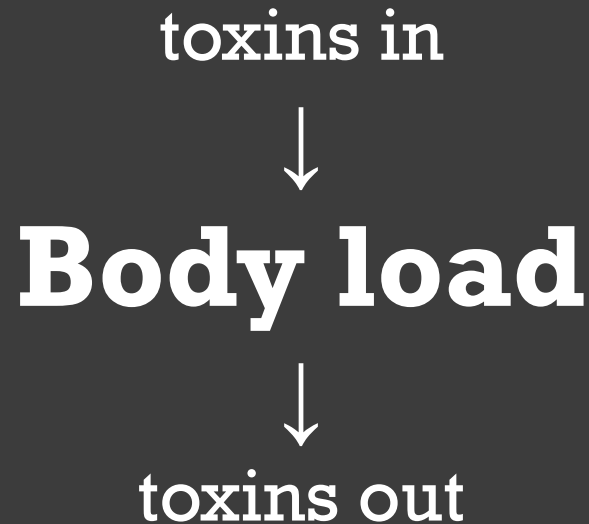
and a mom!!!!

---



# Goal: Keeping the system in balance

---



(the reality)

---

toxins, toxins, toxins, toxins, toxins in



**Body load**

↓  
toxins out

# Toxic Burden

---

Children who become symptomatic with ASD have a high toxic load, such as:

- Lyme neurotoxins and co-infections
- Heavy metals
- emotional burden from the parents
- High EMR exposure
- Pthalates or other environmental toxins (BT)
- High microbial load (molds, parasites, viruses)
- Food allergies, increased intestinal permeability and decreased nutrient absorption
- Sensory overload

This may be why it is one thing (like vaccinations or Lyme exposure) that can be the tipping point into developing symptoms

---

**Mother** (up to 2/3rd of body burden passed on to child during gestation and breastfeeding) .  
70-80 % of mother's mercury burden from amalgam fillings

\*\*\* It is so important to look at your child's history and mom's history to help determine what the biggest obstacles may be

# Where to start???

---

- Clean up the diet
- Reducing stress levels at home
- Reducing toxic exposures
- Getting a baseline nutritional protocol going- oils high in DHA, vit D, minerals, probiotics
- Make sure there is adequate fluid intake



# Diet

---

- So much emphasis has been put on gluten and casein
- Many kids are then put on a junk food GFCF diet
- Think real food that is full of nutrition
- In general, meat and vegetables is best with lots of good fats
- SCD style of diet may be needed for kids who can't get over yeast issues

# Good food choices

---

- ◉ Sugar options: agave, xylitol, honey, stevia
- ◉ Drink clean water
- ◉ High ORAC foods (good antioxidants)
- ◉ Organic, non-GMO (possible bacterotoxin and neurotransmitter inhibitor)
- ◉ Fermented foods
- ◉ Fresh vegetables and fruits
- ◉ Limited dyes and preservatives
- ◉ Grass-fed meats without hormones/antibiotics
- ◉ Seek out food (not junk) to replace gluten and cassein
- ◉ Ghee
- ◉ Good fats (avocado, olive oil, flax...)

# Easy ways to reduce EMR's

---

- Use battery clocks near the bed
- Turn off electrical circuit within 3 feet of the bed
- Use beds without metal
- Get rid of cordless phones over 900 MHz
- Open the windows 10 minutes daily to balance positive and negative ions in the house
- Wear natural fibers
- Unplug computers, video games and other electronics when not in use
- No fluorescent lights or compact energy efficient lights (they are linked to neurological d/o and contain mercury)
- Silver coated netting over the bed

# Grounding

---

- [www.earthing.com](http://www.earthing.com)
- **Inflammation is excess positive charges in the body.** The earth has an excess of negative charges (abundance of free electrons)
- Go out barefoot daily and make direct contact with the earth
- If that is not an option, try earthing patches onto palms, soles of feet or sites of pain
- The earthing patches plug into the grounding portion of the electrical outlet or multi-plug

# Some ways to reduce toxins in the home

---

- ◉ Fragrance-free
- ◉ Don't cook in plastic
- ◉ Water filter for the bath
- ◉ Healthier cleaning products (vinegar is best for molds)
- ◉ Clutter-free
- ◉ Vacuum daily or remove carpets
- ◉ Good quality hepa air filter (Nikken, Austin Air, IQ Air)-  
Use with circulation of a fan
- ◉ No ozone air cleaners

# Some ways to reduce toxins in the home

---

- Use no VOC paints
- Hidden areas of mold: stuffed toys, any porous materials you can't physically wash
- Keep humidity in the house less than 50% (dust mites grow in higher humidity)
- Bedding should be aired out since it retains humidity
- Exposing 1 hour of sunlight to porous materials reduces dust mites by 80%
- Stainless steel or ceramic coated cast-iron pans

# Support the organs of elimination

---

- Before doing any anti-microbial or metal treatments, you absolutely have to **support the detox organs**:
  - Kidneys
  - Liver
  - gut
  - skin/lymph
- Never do more killing than what the body can eliminate!

# Supporting the Kidneys

This organ is an absolute must to support if you are chelating metals!!!

---

- **Renelix** by Pekana
- **M Water**
- **Unda 243**
- **Electrolytes** added to all fluids
- **Burdock** or **Dandelion** tea
- Nestmann **Solidago** tincture
- **Acupuncture/ Neural therapy**
- **K-Drain** by Transformation Enzymes
- **Emergen C** added to liquids
- Tapping on K27 whenever taking supplements
- **Cilantro** rubbed **topically** over the kidneys



# Function of the liver

---

- Detoxifies chemicals, drugs, hormones, etc.
- Stores vitamins (A,D,E,K,B's), iron & copper
- Manufactures clotting factors & transport proteins
- Produces bile & cholesterol (for steroid hormones)
- Houses many immune cells & filters blood
- Metabolizes proteins & synthesizes amino acids
- Converts amino acids to glucose (gluconeogenesis)
- Converts glucose to glycogen & glycogen to glucose
- Metabolizes fatty acids for energy
- Synthesizes lipoproteins & phospholipids
- Produces glutathione to bind heavy metals, etc.

# Liver Support

*(Suspect this is needed when the bowels are sluggish and your child is not tolerating any medications and is sensitive to most supplements and foods)*

- **Dandelion Root**
- **Ultrathistle** (milk thistle product that is easier to absorb)
- **Liver Life** by BioRay ([www.bioray2000.com](http://www.bioray2000.com))
- **Castor oil packs** over the liver with heat for up to 50 minutes daily
- **Coffee enemas**, especially when Herxing (not on very young children)

# Liver Support

---

- Ensuring regular bowel movements
- Treating candida/yeast
- **Thorne TAPS, Liver Cleanse or Toxic Relief Booster**
- Neural therapy with Heel **Hepar compositum** or **Hepeel**
- **Phosphatidyl Choline** and **Glutathione**
- Reduce overall supplement and medication load

# The gut

---

- ◉ **Constipation**- vit C, mag citrate, JLB, aloe, think yeast, castor oil packs
- ◉ **Diarrhea**- probiotics, charcoal, bentonite, arsenicum homeopathic, think bacteria/foods
- ◉ **Gas/bloating**- bacteria or yeast or foods, enzymes
- ◉ Lack of **appetite** or voracious appetite- adrenals, parasites
- ◉ **Rashes/eczema**- think foods or yeast
- ◉ **Puffy eyes** (aka allergic shiners)- foods or supplement reactions

# Digestive Enzymes

- Many kids just aren't digesting foods properly
- Adding good quality digestive enzymes can reduce digestive distress and also reduce some of the negative behaviors that come from food reactions
- Be careful with chewables and the tooth enamel
- My favorites:  
**Kirkman Enzyme Complete DPPIV with isogest**  
**Klaire Vitalzymes Complete**  
**Houston TriEnza, Zyme Prime and AFP peptizyde**  
**Houston No Fenol** (kids with bright pink lips or rashes around the mouth)  
**Pharmax Glutenzyme or Dairy-Ease**

# Clostridia and abnormal bacteria

---

- ◉ With **bacterial overgrowth** you tend to see **AGGRESSION!** (biting, hitting, head banging)
- ◉ Stool tests shows low growth of good bacteria and high levels of all kinds of bacteria that should not be there
- ◉ Markers on the OAT show high HPHA
- ◉ Note that the **clostridia that makes kids seem crazy is not always C. diff** (may be other species)

# Treating Clostridia

---

- ◉ **BioImmersion Supernatant**- 2 daily
  - probiotic specifically proven to kill resistant strains of Clostridia resistant to antibiotics
- ◉ High doses of **bifidus**
- ◉ **Culturelle**
- ◉ **Saccharomyces** (sometimes)
- ◉ Often **Flagyl** or **Vancomycin** would be needed if aggression is very bad (**immediate calming effect**)

# Treating Bacterial Overgrowth

---

- **High doses of probiotics**, up to 2-300 billion
- **Keep probiotics at least 1 hour AWAY from anti-microbials** of any kind
- Klaire Detox Support has **no strep strains**
- VSL3 (note some flavors contain corn)
- **Berberines**
- Figure out **what is disrupting the pH** (food reactions, supplements, etc)



# Clinical signs of parasites

---

- Rashes on the chest or neck
- Discoloration around the mouth
- Males often have risky behaviors
- Aggravations around the full moon (bloating, irritation, etc)
- Pimples on the head within the hair

(stool test from Metamatrix uses a DNA probe for better sensitivity)

# My favorites for treating parasites

(the most difficult to lab test, but **the first thing to treat**)

---

- **Alinia** (dose varies)- 3 day protocol repeated in 2-3 weeks
- We are seeing more and more needing to do a longer continuous protocol lasting several weeks: **Biltricide, Ivermectin/Pyrantel, Albenza, Alinia**
- It seems to be very effective to **follow prescription parasite medications with homeopathic support**

# My favorites for treating parasites

(the most difficult to lab test, but the first thing to treat)

---

- **Mimosa Pudica** (from Hopkinton drug)- herb that also has liver protective effects- given twice a week for several weeks
- **BioPure Rizol oils**- very yucky taste, can be put into capsules
- **Artemisia** pulsed in high doses 3 days on every 2-3 weeks
- **Vermox/Mebendazole** (100mg BID \* 3days, then repeat after 3 weeks)
- **Biltricide** (600mg TID for one day then repeat in 2-3 weeks)

# Clinical signs of yeast/fungus

---

- Gas and bloating
- Lower abdomen is resistant to weight loss
- Kids- high pitched squealing, silly , flushed cheeks and stimming
- White coating on the tongue
- Brain fog and fatigue
- Vaginal or anal irritation/itching/redness
- Headaches
- Weakness/ fatigue
- Sugar cravings
- Stinky BM's
- Light sensitivity
- Rashes
- Memory loss or concentration difficulties
- Joint pain and morning stiffness
- Shortness of breath
- Sinus congestion
- Numbness and tingling
- Skin sensitivity
- Muscle aches and pains

# Natural Treatments for Fungal Issues

---

- **Biotin**- used to repair the carboxylase enzyme damaged by oxalates. Important with kids with unresolving yeast issues.
- **Low oxalate diet** and **low carb** and sugar diet
- **Neem**- this has been very well tolerated, especially when there are also sinus issues
- **Probiotics** (like Klaire Therbiotic Complete or Detox Support, VSL#3, Custom Probiotics or BioImmersion Beta Glucan probiotic to stimulate gut immunity)
- **Saccharomyces** - DAN! protocols have been known to use up to 9 daily!!!

# Natural Treatments for Fungal Issues

---

- **Uva Ursi**- many stool tests are showing this to be effective
- **Biocidin**- this has been very effective and the drops are not bad tasting
- **Caprylic acid or undecylinic acid**
- **Brainchild Nutritionals yeast rotation**- mainly drops, works very well, taste is not too bad

# Mold sensitivities

- Go to [www.survivingmold.com](http://www.survivingmold.com) to learn more about Ritchie Shoemaker's protocols and testing
- Suspect with kids that have "yeast" issues within days of discontinuing anti-fungals
- This is more of an allergy and immune/inflammatory reaction
- Kids that are agitated when it rains or after going to the library or church
- Often allergic shiners and multiple small lymph nodes all the time in neck
- Forehead feels squishy and they generally look inflamed
- Snoring/sinus issues/generally very sensitive to smell and foods

# Mold Sensitivity Approaches

---

- **stabilize mast cells** (look up Dr. Theoharides)- quercetin, hydroxyzine, ketotifen, benedryl, vit C
- **bind up neurotoxins**- high doses of EPA and DHA, charcoal, CSM, bentonite
- **Pleo Nig** given 2-3 times daily
- Do an **ERMI** to check the home!



# Favorites for Heavy Metal Detox

*Clear the excretory organs first, before chelating the brain*

---

- Yeast and metals go hand in hand....address both concurrently
- **Address KPU issues-** CORE, zinc, manganese, B6, etc.
- **DMPS-** detoxes the kidneys, more specific for mercury and might remove mold or Lyme mycotoxins
- **DMSA-** detoxes the liver and suppositories are tolerated better (less yeast flare)
- **BioPure Microsilica-** this is an oral antioxidant that is silica based and works to increase glutathione production in the intestines. This is an option for kids with sulfation issues and gut issues. Easy to take as a powder, mix with oils or vit C to enhance effect. Do daily or 5 days on, 2 days off. My first choice for sensitive kids and adults.

## Favorites for Heavy Metal Detox

- **EDTA**- Suppositories in rotation has worked well, more specific for lead (Detoxamin). Orals are great for addressing biofilms.
- **CGF liquid**- a good mobilizer and early intervention
- **BioPure Cilantro tincture** or **Nutramedix Parsley Detox** (orally up to 10 drops in hot water or topically along the lymph and kidneys)
- **Liquid Phosphatidyl Choline (BioPure Phospholipid Exchange, LipoHealth, AR LipoPhos)**- (small daily doses like 0.5-1 tsp daily in kids)- contains alpha lipoic, magnesium, EDTA and phospholipids. This goes great with microsilica or artemesinin and acts as a carrier for other medications to help absorption.

# Favorites for Heavy Metal Detox

---

- **Chlorella pyrenoidosa** or **CGF Chlorella** (the CGF chlorella is often tolerated better when you first start)
- **Transdermals** can be effective to bypass the gut and often are more specific to clean up the nervous system
- **Multi-minerals** (especially on the non-chelating days...liquid forms seem easiest to absorb and tolerate)- you should load up your child on minerals at least one month before starting chelation
- A sign that you are pushing kids too fast is loud tooth grinding. Slow down and support the kidneys!

# Addressing Methylation Defects

---

- Dr. Neubrander's **mB12** protocol ([www.drneubrander.com](http://www.drneubrander.com)) options are also nasal spray or sublinguals
- **Dr. Vinitzky's 5:2 folic to hydroxy B12** to help detox- easiest is 1 drop of Folirinese on 1 tab Perque Activated B12 guard up to 4 times daily
- **MTHF-folate** (Thorne, Metagenics FolaPro, Klaire)- at least 1 daily
- **Folinic-** (like Thorne Folacal)- often needed in addition to MTHF-folate at first and this is also available for injection
- **Phosphatidyl Serine-** Seriphos is a non-soy option- this is also quite calming

# Tonsils/Biotoxins

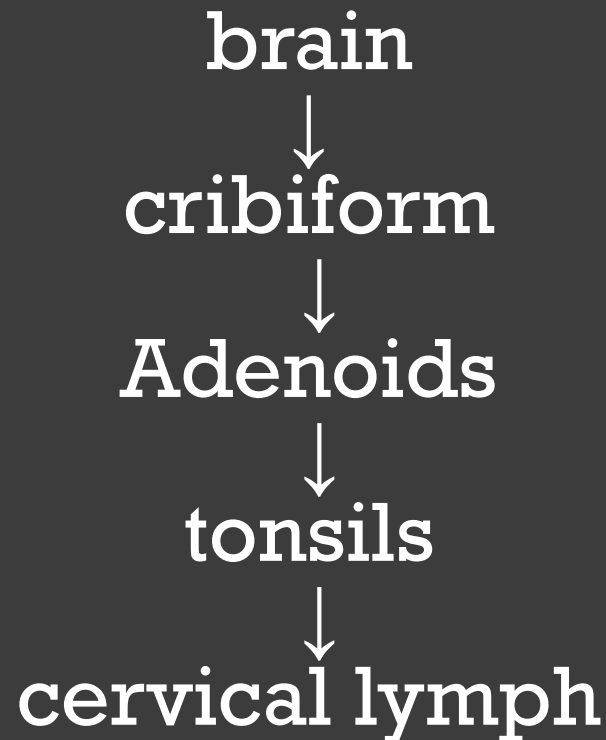
---

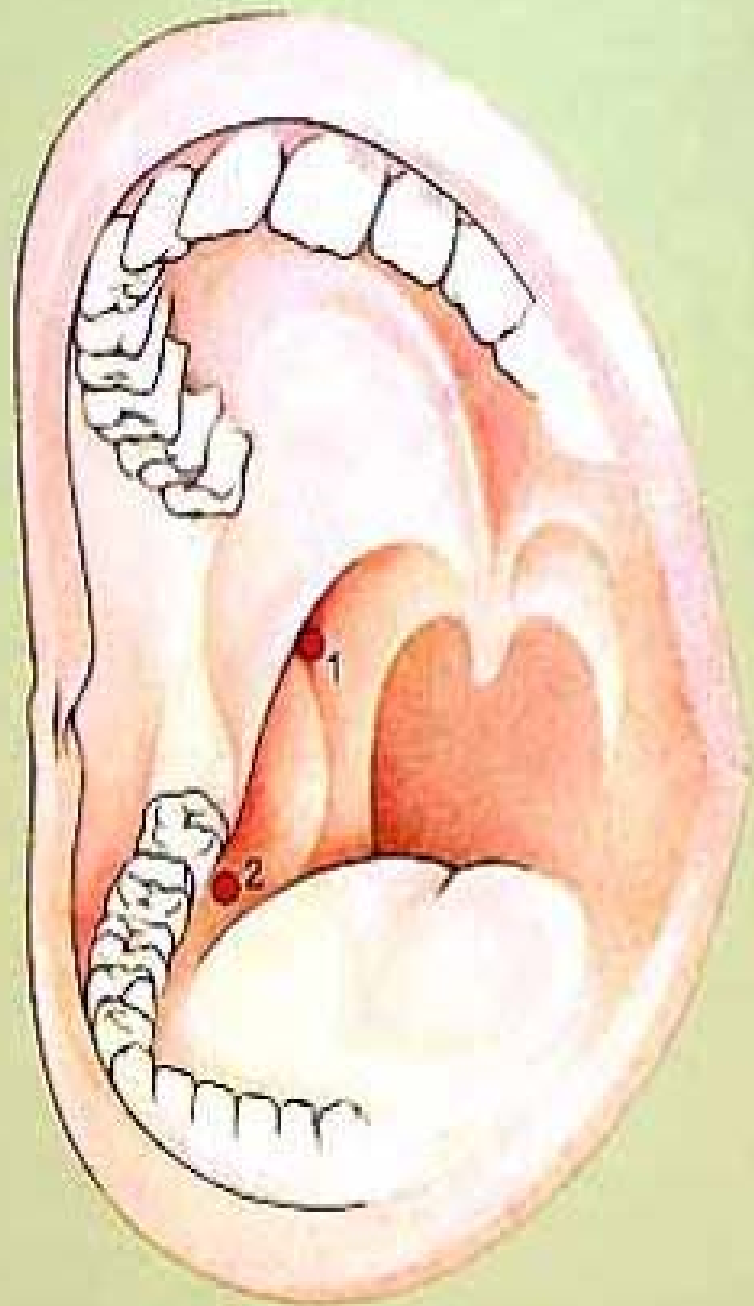
- Chronically infected **tonsils** are often a major contributing problem in brain inflammation/autism/autoimmunity
- Degenerated tonsils often house multiple bacterial and viral colonies and produce potent brain neurotoxins
- Strep related brain autoimmunity symptoms in autism: verbal stims, repetitive, ritualistic, obsessive-compulsive (PANDAS)
- Be prepared that currently ENT doctors often do not believe that tonsil infections are problematic - and resist performing a tonsillectomy

# The Tonsils

**Congestion in this area due to chronic infection is common and leads to back-up of lymph flow and detox out of the brain**

---





# Treating the tonsils

*(these are also treatments for chronic strep, but need to be done at least 6 months to change the immune response in the brain)*

- **Pleo Not, Pleo San Strep** and/or **Pleo San Pseu** (5 drops BID-TID for 6 weeks to treat acute infection, followed with **Pleo Sancom** for up to 1 year)
- Reduce **food allergens**, especially dairy
- **Lymph drainage** remedies like Heel's Lymphomyosot, Pekana Itires, PCHF Lymph Stim Liqueescence or Transformation Enzyme's L-Drain are helpful
- Manual Lymph drainage or a **rebounder**



# Treating the tonsils

---

- **Laser** treatments to stimulate lymph drainage
- Get an **air filter**, **wash bedding** and **vacuum** the bedroom
- **Biocidin drops**- take them straight 2-3 times daily
- Heel **tonsilla compositum**- 1 vial orally 1-2 times each week for 1 year or more
- If persistent ear infections or sore throats occur, do not delay in having an EENT evaluation for consideration of **tonsillectomy**

# Treating the tonsils

---

- Dental hygiene/Tongue scraper
- Salt water gargle or Neti pot
- NF **Thymactiv** in an acute phase
- **Brainchild Oregon Grape** Liquid
- **Regenerative cryotherapy** ([www.kryopraxis.de](http://www.kryopraxis.de))
- It may also be necessary to have the bite evaluated for **occlusal problems** disrupting lymph flow (easy first step is a night guard or braces)

# PANDAS

Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcus

- verbal stims, repetitive, ritualistic, obsessive-compulsive behaviors
- Severe regression after exposure to strep, even if no URI symptoms appear
- Lab markers can be deceiving
- You have to treat for at least 6 months to give the immune reactions to down-regulate
- Antibiotics being used are once a week **Zithromax** or daily **Augmentin** (do all you can to protect the bowel flora)

# PANDAS

- Natural treatments that are most effective:
  - **Biocidin**- may need 10 drops twice daily
  - **Andrographis complex** by MediHerb- 1-2 months alternating with something else
  - **Berberines**
  - **Researched Nutritionals Transfer Factor STP**
  - **Pleo Not** regularly as follow up

# Boosting the immune system

---

- ◉ **Immusist Natural** ([www.immusist.com](http://www.immusist.com)) this is my new absolute favorite remedy to enhance absorption, anti-viral, seems to correct many imbalances
- ◉ **GcMAF or K-MAF**
- ◉ **Xymogen IgG 2000 DF**
- ◉ **Mushroom** preparations
- ◉ Mannatech **ambrotose**
- ◉ **Address the tonsils!**

# Immusist Natural

## ([www.immusist.com](http://www.immusist.com))

---

- Product in use for past 20 years- mainly 3<sup>rd</sup> world HIV clinical trials and some use with cancer
- Seeing significant lab changes within 30 days
- Surfactant product that is:
  - antioxidant
  - anti-bacterial
  - anti-viral
  - anti-fungal
  - increases cellular hydration
  - helps to decrease inflammation

# Immunist Natural

- Many of the kids I work with went on it on their own and we have seen:
  - better reports at school
  - less aggravation with winter illnesses
  - overall cognitive improvements
  - other meds start being needed in lower doses
- It is thought to cross the BBB and clinically appears to do so
- Goal with this is to repair the immune system to take care of itself
- **Adult dosing:** work up to 16 drops TID
- **Child dosing:** work up to 8 drops TID
- **Sensitive people or very sick:** 1-2 drops many times a day

# My favorite natural Lyme treatments

- BioResource (Byron White) **A-L complex**- this is a low dose product!
- **Samento (Cat's Claw)**- doses up to 15 drops twice daily, working up slow and backing off if a herx occurs
- **Artemesia**- pulsed for Babesia and parasites- 100-200mg 5 days a week
- Nutramedix **Cumanda**- particularly good if there are joint issues. Up to 30 drops daily, well tolerated.
- **Beyond Balance Bb-1, Bab-1, Bar-1, Clarity K and Clarity K detox**- classic doses up to 8 drops twice daily typically. Well tolerated and glycerite based



# My favorite natural Lyme treatments

---

- **Nutramedix Enula-** Adults needing up to 30 drops BID for 3-4 months (Babesia)
- **Colloidal Silver-** dosage varies with the product
- Researched Nutritionals **Transfer Factor LymPlus** or **Transfer Factor PlasMyc-** 1-2 daily
- **BioPure Quintessence-** This is a mix of Stephen Buhner's top 5 herbs and has a very nice synergy and tolerance- for kids I do up to 2 dropperfuls twice daily

# Clinical signs of viruses

---

- Hot and soft tissue in the forehead repeatedly
- Tinnitus and noise sensitivity
- Fatigue
- Elevated WBC's when symptoms get worse or chronically very low WBC's (in the 2's)
- Enlarged lymph nodes
- Cold sores or canker sores

# Treating Viruses

- **Vitamin A** (some are using up to 400,000IU daily for 2 days every 6 months)- Dr. J. McCandless
- **Monolaurin** or **Lauricidin** (especially if ASD symptoms become worse after a cold or flu)
- **Olive leaf** (I prefer a tincture mixed with **Ginkgo**)
- **LDM-100** (rash often occurs around day 7-9)
- Mannatech **Ambrotose**- up to about 3 scoops daily
- **Immusist Natural**- up to 8 drops 3 times daily

# Treating Viruses

---

- ◉ **Astragalus**- great in acute exposures
- ◉ Combinations like Vital Kids **Berry Well Immune** (mild taste)
- ◉ Researched Nutritionals **Transfer Factor Multi-Immune**
- ◉ **Echinacea/Goldenseal** short term (NF Thymactiv or PCHF High Energy Echinacea liquid)
- ◉ **BioPure Stephania or Viressence**

# Immune support

---

- **Vit D**- doses up to 2000IU daily for kids is common. Per Dr Mercola's latest research typical dose needed is 35 IU/lb and I find serum level goal is 60-80 for best effect
- **Elderberry** syrup if any symptoms appear- tastes great and works great for viruses. Can dose 3-4 times daily.
- **Probiotics**- especially during cold/flu season

## Immune support

- **Selenium**- 200mcg daily during cold/flu season and go up during acute infection
- **echinacea and thymus** glandulars (like NF thymactiv) at first signs of infection
- **Biocidin**- 5 drops twice daily to 3 times daily at first signs of infection (be more aggressive with Strep)
- **Propolis diffuser** ([www.beehealthy.com](http://www.beehealthy.com)) or **Young living Purification or Theives oil** in a diffuser

# Herx Support (die off management)

---

- Chlorella- bigger doses are more binding. Typically 1000mg or more per 50 lbs body weight
- Vit C in frequent doses- with each meal and at bedtime, natural anti-histamine
- Fluids- goal is  $\frac{1}{2}$  body weight in ounces. Make sure to add some minerals or electrolytes to this.
- Exercise- moving your body helps circulate the lymph, even if it is just stretching

# Herx Support (die off management)

---

- Epsom salt baths- 2 cups in the tub or 1 cup in a leg soak. Good source of magnesium.
- clay baths- messy but good especially when detoxing chemicals and metals
- Have a BM (mag, C, prunes)- goal is twice a day
- Fiber/clay- to bind up the toxins in the gut to prevent reabsorption

## My favorites:

- Mila- 1 Tbls soaked in water for 30-60 min daily
- New Sun Fiber Cleanse without psyllium
- Argiletz Green clay soaked in vegetable juice for at least 30 min
- Sonne bentonite liquid



# Herx Support (die off management)

---

- Charcoal- this is the #1 suggestion when people call the office in crisis. If it constipates, chase it 30 min later with magnesium citrate
- Cholestyramine- especially for severely neurotoxic people or those with severe mold issues. Traditional products contain aspartame, so ask for “no aspartame” or get it compounded without sweeteners
- Proteolytic enzymes- these are systemic enzymes taken away from food to clean up the blood and matrix. Some of my favorites:
  - Vitalzym X
  - Wobenzym
  - Boluoke
  - Zyflamend

# Herx Support (die off management)

---

- Liquid minerals- like Minerals of Life or Matrix Minerals, these are especially good if kids are grinding their teeth or if you are feeling achy in all muscles
- Coffee enemas- These really get things moving fast and are essential for those who get overloaded quickly. Use an organic (ideally green) coffee, and start in small strength and work up. This helps dilate the bile ducts to allow a better liver/GB/bile release
- colonics- Do 3 in a close amount of time to start off, then do weekly until symptoms are improving

# Herx Support (die off management)

---

- Pure Encapsulations Cholestepure- This is nice when other binders are too constipating
- Beyond Balance Tox Ease GL liquid- This really seems to clean things up cellularly and in the tissue space. Dose this 3 times daily.
- Nutramedix Burbur detox and/or pinella- Can be dosed up to every 15 minutes during a crisis
- Chelators- things like DMSA, EDTA, DMPS or microsilica are very useful especially when the person has a high metal load

# Gut Biofilm Protocol

(credit to Dr. Anju Usman)

This can be repeated twice daily

- **Step 1- Lysis and Detachment of the Biofilm**  
Use enzymes and/or chelators on an empty stomach to “punch holes” in the biofilm
- **Step 2- Target the Microbe**  
30-60 minutes later take antimicrobials (Lyme, yeast, bacterial treatments)
- **Step 3- Clean Up the Mess**  
1-2 hours later (or at night) take toxin binders
- **Step 4- Rebuild**  
probiotics, fermented foods, vitamins

# Gut Biofilm Enzymes

---

## Some products being used:

- **SPS 30** by Theramedix ([www.theramedix.net](http://www.theramedix.net))
- **Mucostop** or **Virastop** by Enzymedica ([www.enzymedica.com](http://www.enzymedica.com))
- **Apple cider vinegar**
- **Serrapeptase** (especially for yeast)
- **Klaire Interfase or Interfase Plus**
- **Kirkman Biofilm Defense**

# Gut Biofilm Chelators

- There is some controversy on this and you should not add any chelators without close supervision and awareness by your practitioner (advantage is that oral EDTA is poorly absorbed, so most of it stays in the digestive tract where we want it)
- Current protocols use oral sodium or magnesium EDTA in powder or capsule form ([www.wonderlabs.com](http://www.wonderlabs.com) is inexpensive)  
Studies on Vancomycin-resistant staph infections showed effectiveness when combined with oral EDTA
- Another option is BioPure Phospholipid Exchange at  $\frac{1}{2}$  - 1 teaspoon per dose
- Other oral chelators could be helpful as well

# Gut Biofilm Toxin Binders

*these are the same things to take when herxing*

---

- ◉ Fiber (caution with psyllium)
- ◉ Chitosan (caution with shellfish allergy)
- ◉ Clays
- ◉ Zeolites
- ◉ Chlorella
- ◉ Modifilan
- ◉ Apple pectin
- ◉ Butyrate
- ◉ Bentonite
- ◉ Activated Charcoal (especially if killing yeast)

# Natural anti-inflammatories

(consider these when kids become stimmy and agitated)

---

- ◉ Bromelain
- ◉ Quercetin
- ◉ Hesperidin
- ◉ Curcumin
- ◉ Turmeric
- ◉ EFA's- especially cod liver, fish or salmon oil
- ◉ Vit C in high doses
- ◉ Pekana Inflamyar homeopathic
- ◉ Acai or other highly pigmented antioxidants



# Essential Fatty Acids

---

- Most of us are using some form of **fish oil** in fairly high doses
- Parent and teacher feedback has been consistent with ADD/ADHD especially (with **high dose DHA**)
- This is one supplement that I notice **most kids crave**
- Essential fatty acids are important for proper nervous system function and brain development
- I also really like **salmon oil** if there are issues with “fish burps”
- But, we may be able to do more....

# Parent Essential Oils (PEO's)

---

- [www.brianpeskin.com](http://www.brianpeskin.com) offers the latest research
- Benefits of PEO's
  - allow oxygen to reach cells
  - each cell is surrounded by a membrane that is 50% fat
  - the unsaturated portion of that membrane helps the inside of the cell absorb oxygen
  - getting oxygen into the cell can help to fight all intracellular infections (this is essentially what we are trying to do with HBOT)

# Supplements containing PEO's

---

- YES parent essential oil caps and liquid (pumpkin, EPO, safflower, sunflower, flax and coconut oils)  
[www.yes-supplements.com](http://www.yes-supplements.com)
  - this is the product Brian Peskin endorses and the one we are having nice results with so far
- Jarrow brand Omega Nutrition Essential Balance Organic Oil (flax, pumpkin, sunflower, olive oils)  
[www.jarrow.com](http://www.jarrow.com)
  - nice thing is it comes in black HDPE plastic to prevent oxidation and they also make a butterscotch flavor junior formula

# Stimming!

- Goal is to calm down the inflammation and agitation

- Helpful supplements:**

**binders**- especially if stimming comes after adding anti-microbials

**GABA**- up to 3 times daily

**theanine**- up to 3 times daily

**relora**- up to 3 times daily

**PCHF neurocalming drops** as needed

# Stimming!

---

**Inflamylar** by Pekana drops

Nutramedix **Burbur detox** and **Pinella** or **Tox Ease GL** by Beyond Balance- dosed frequently

**Seriphos**- up to 3 times daily

**anti-inflammatories**

**valerian and/or chamomile**

**lithium orotate (neuroprotective)**

# Last, but not least, treat Mom!

---

- Sleep
- Adrenal support- ashwaganda, seriphos, rhodiola
- Get some time away from the kids
- It is essential that parents are in a good place so they can be there for their kids. It is NOT selfish for parents to address their own health before their kids are better!

# Remember...

---

- Kids are recovering every day
- You can never do everything, but each thing you do will make a difference!
- Control what you can and go one step at a time...